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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/252,691 | 02/18/1999 | KEITH G WEINSTOCK | 107196.135 | 4791 |

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EXAMINER

PORTNER, VIRGINIA ALLEN

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1645

DATE MAILED: 05/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Interview Summary

Application No.
09/252,691

Applicant(s)
Weinstock

Examiner
Portner

Art Unit
1645



All participants (applicant, applicant's representative, PTO personnel):

(1) Portner (PTO Personnel)

(3) Mr. Robert Spadafora (Registration Number 46,197)

(2) Mr. George Elliott (PTO Personnel)

(4) Ms. Nina Pearlmuter (Applicant's Representative)

Date of Interview Apr 16, 2003

Type: a) ☒ Telephonic b) ☐ Video Conference
c) ☐ Personal [copy is given to 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No. If yes, brief description:

Claim(s) discussed: all of record

Identification of prior art discussed:

all of record

Agreement with respect to the claims f) ☐ was reached. g) ☒ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments:

The applied reference Blattner et al, applied to claims 5, 9, and 29 was discussed; in view of the claimed invention having been amended to no longer recite a nucleic acid that encodes a polypeptide of SEQ ID NO 7056 (amino acid sequence), but now recites at least 25 or 30 sequential nucleotides of SEQ ID No 1394, the prior art rejection is herein withdrawn in view of the arguments set forth in the personal interview. The rejection of claims 1-10, 29-41, 43-45, 47-50 under 35 USC 101, and 112, first paragraph were discussed relative to the submitted reference Koonin (1996). The Koonin reference (1996) was asserted to define a utility for the instantly claimed invention as a pseudouridine synthase. The examiner upon consideration did not find any discussion of Koonin in the instant specification relative to "Ymfc" or the instantly claimed invention. Only homology to a putative E.coli open reading frame, "ymfc" could be found at page 178. Koonin does not discuss "ymfc" (see additional narrative attached hereto).

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

i) ☒ It is not necessary for applicant to provide a separate record of the substance of the interview (if box is checked).

Unless the paragraph above has been checked, THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached

[Signature] 11/14/03 + 4/16/03

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Examiner's signature, if required

(780) 398-2530

Art Unit: 1645

1. Mr. Spedafora additionally pointed to Del Campo et al (2001) in defining a key role of pseudouridine synthases as essential genes for screening for antimicrobial agents.

It is the position of the examiner that while Del Campo et al (October 2001) does discuss “ymfc” of E.coli, (page 1604, col. 2, paragraph 2) it was pointed out that the E.coli open reading frame “ymfc” is in fact “rluE” a pseudouridine synthase; the functionality of the encoded polypeptide having been determined and made public in the publication, the date of the publication being after the filing date of the instant specification. The functionality of the open reading frame encoded polypeptide was not defined until after the filing date of the instant Application.

Additionally it was noted in Del Campo et al, (see page 1605) that deletion of any one of the cited pseudouridine synthase coding sequences did not functionally effect the growth rate of resultant the mutant strain. The reference states “[F]unctional characterization by growth rate measurements did not reveal the need for any of these Ψ when singly deleted.” Therefore, Del Campo et al, a reference submitted by Applicant, provides support that any single pseudouridine synthase gene individually does not define a gene that directly effects viability in light of the fact that single knock out mutants were still able to maintain their growth rate, thus providing evidence that any single gene is not an “essential gene” that effects cell growth rate, and indirectly, does not effect overall viability.

Art Unit: 1645

2. The scope of the claimed invention was discussed relative to the disclosure of the instant Specification, and Mr. Spedafora asserted that the claimed nucleic acids that encode polypeptides have utility in the disclosed screening methods for identifying antimicrobial agents.

3. It is the position of the examiner that the instant Specification at page 39, lines 10-13 states “[T]he information allows one of ordinary skill in the art to determine a potential use for each identified coding sequence, as a result, allows to use the polypeptides of the present invention for commercial and industrial purposes” which statement does not define a new useful product as now claimed. The instant specification sets forth an invitation to experiment to determine a real world use for encoded polypeptides, of the E.coli homolog open reading frame, set forth as SEQ ID NO 1394, encoding the amino acids of SEQ ID 7056 obtained from E.cloacae.

a. Brenner v. Manson, 383 US 519 (1966) conveyed that: The basic quid pro quo contemplated by the Constitution and the Congress for granting a patent monopoly is the benefit derived by the public from an invention was substantial utility. Unless and until a process is refined and developed to this point-- where specific benefit exists in currently available form-- there is insufficient justification for permitting an applicant to engross what may prove to be a broad field.

b. Brenner v Manson also stated “[B]ut a patent is not a hunting licence. It is not a reward for the search, but compensation for its successful conclusion.”

Art Unit: 1645

The claimed nucleic acid molecules that encode polypeptides of no biological function could not be used to produce any products with a real world utility based upon the disclosure in the instant specification for the instantly elected and claimed invention.

The rejections over the claims under 35 U.S.C. 101, and 112 ,first paragraph are maintained for reasons of record and responses set forth herein.